The Dietary Diversity of Mothers

Implications for maternal health and children’s diets in the context of food security

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Household Food Access

- Food Quantity
- At all Times

- Food Quality
- For all Household

Family or household dietary adequacy (no validated measure)

Dietary Diversity of an index member

But recently has been linked to…
## Study Design

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Households</td>
<td>12,323</td>
<td>10,254</td>
<td>15,048</td>
</tr>
<tr>
<td>Women age 15–49 years</td>
<td>4,916</td>
<td>10,757</td>
<td>16,823</td>
</tr>
<tr>
<td>24-hour diet recall (food groups)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mother/child pairs (children 6–23 months)</td>
<td>857</td>
<td>1,691</td>
<td>2,329</td>
</tr>
</tbody>
</table>
Maternal Nutritional Status

- Underweight mothers
- Stunted children (6–23 months)
- Anemic mothers

- Cambodia
- Haiti
- Ghana
## Dietary Diversity Food Groups

<table>
<thead>
<tr>
<th>Maternal Dietary Diversity Indicator (9 categories)</th>
<th>Child Dietary Diversity Indicator (7 categories)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains, roots, and tubers (starchy staples)</td>
<td>Grains, roots, and tubers</td>
</tr>
<tr>
<td>Legumes and nuts</td>
<td>Legumes and nuts</td>
</tr>
<tr>
<td>Dairy products (milk, yoghurt, and cheese)</td>
<td>Dairy products</td>
</tr>
<tr>
<td>Eggs</td>
<td>Eggs</td>
</tr>
<tr>
<td>Meats (animal flesh, fish, and poultry)</td>
<td>Meats and organ meats</td>
</tr>
<tr>
<td>Organ meats</td>
<td></td>
</tr>
<tr>
<td>Vitamin A–rich dark green leafy vegetables</td>
<td>Vitamin A–rich fruits and vegetables</td>
</tr>
<tr>
<td>Vitamin A–rich (orange or yellow) fruits and vegetables</td>
<td></td>
</tr>
<tr>
<td>Other fruits and vegetables</td>
<td>Other fruits and vegetables</td>
</tr>
</tbody>
</table>
Percent of Mothers Consuming Nine Individual Food Groups

Grains, roots, and tubers
Legumes and nuts
Dairy
Eggs
Organ meat
Meats
Vitamin A–rich DGLV
Orange/yellow F&V
Other fruits and vegetables

Cambodia
Haiti
Ghana
Breastfed Children’s Diets Resemble their Mothers’ Diets

Ghana

Haiti

Cambodia

- Other fruits and vegetables
- Other vit A-rich fruits and veg.
- Vit A-rich DGLV
- Meats
- Organ meat
- Eggs
- Dairy and dairy products
- Legumes and nuts
- Grains, roots, and tubers

Stacked Percentages

Mothers  breastfed infants

Stacked Percentages

Mothers  breastfed infants

Stacked Percentages

Mothers  breastfed infants
Breastfed Children’s Diets Within Mothers’ Diets

Ghana

Numbers are risk ratios for children eating each food group based on whether their mothers ate it.
The Percent of Children with Minimum Diversity Increases Rapidly with Maternal Diversity

Breastfed children

Maternal Dietary Diversity

Cambodia
Haiti
Ghana

Percent of children

0 10 20 30 40 50 60 70 80

≤2 3 4 5+

Maternal Dietary Diversity
Mothers with Higher Diversity have Children with Higher Diversity* (Ghana)

Breastfed Children attaining Minimum Diversity

*Estimates adjusted for children’s age and gender
Thank You

• Monica Kothari, ICF Macro, DHS
• Martin Wulfe, Independent Consultant
• Aimee Benson, Independent Consultant